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MORBIDITY AND MORTALITY WEEKLY REPORT

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# World AIDS Day - December 1, 1997

"Children Living in a World with AIDS" is the theme designated by the Joint United Nations Program on HIV/AIDS (UNAIDS) for this year's World AIDS Day, December 1, 1997. World AIDS Day focuses attention on the human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS) pandemic. Worldwide, an estimated 23 million persons are infected with HIV; of these, approximately 40% are women (1). By the end of 1997, an estimated 1 million children aged <15 years are expected to be infected with HIV; of these, approximately 90% live in developing countries (1). In the United States, however, the substantial declines in perinatally acquired AIDS reflect the success of prevention interventions and underscore the need to develop effective strategies to reduce HIV transmission worldwide. In the United States, activities for World AIDS Day are coordinated by the American Association for World Health in collaboration with UNAIDS, the Pan American Health Organization, and the U.S. Department of Health and Human Services.

Additional information about HIV infection, AIDS, and World AIDS Day is available from CDC's National AIDS Clearinghouse, telephone (800) 458-5231 or (301) 519-0023; CDC's National AIDS Hotline, telephone (800) 342-2437; and CDC's Division of HIV/AIDS Prevention Home Page on the World-Wide Web, http://www.cdc.gov/nchstp/hiv\_aids/dhap.htm.

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 Joint United Nations Programme on HIV/AIDS. Children living in a world with AIDS. Geneva, Switzerland: World Health Organization, June 1997.

# Update: Perinatally Acquired HIV/AIDS — United States, 1997

Perinatal transmission of human immunodeficiency virus (HIV) accounts for virtually all new HIV infections in children (1). Through 1993, an estimated 15,000 HIV-infected children were born to HIV-positive women in the United States (2). In 1994, clinical trials demonstrated a two-thirds reduction in the risk for perinatal transmission associated with treatment of HIV-infected pregnant women and their infants with zidovudine (ZDV) therapy (3). The Public Health Service (PHS) issued guidelines for the use of ZDV to reduce perinatal transmission in August 1994 and for universal HIV counseling and voluntary testing of pregnant women in July 1995 (3,4). This report describes increases in HIV testing and use of ZDV treatment among HIV-infected mothers and a continued substantial decline in the incidence of acquired immunodeficiency syndrome (AIDS) during 1992–1996 among children who were infected through perinatal HIV transmission (5).\*

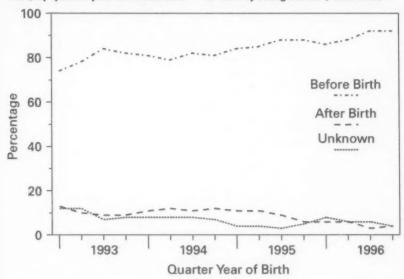
For states that conduct HIV surveillance, characteristics were examined for children born to HIV-infected mothers (i.e., perinatally exposed) during 1993-1996. Children were classified into one of four categories: those with AIDS, those with HIV infection but without AIDS, those who were uninfected, and those of indeterminate infection status. Timely ascertainment of HIV infection status of children born in 1995 for HIV reporting states versus AIDS-only reporting states was assessed in comparison to estimates of the number of births to HIV-infected women from the National HIV Serosurvey of Childbearing Women (SCBW) (2). Trends in perinatally acquired AIDS incidence were analyzed by quarter year of diagnosis from January 1984 through March 1997 and were adjusted for reporting days with reclassification of cases initially reported with no identified risk (1). Evaluation of efforts to reduce perinatal transmission following issuance of the PHS quidelines was restricted to analysis of the estimated incidence of perinatally acquired AIDS among infants (aged <1 year) by year of birth. To control for changing birth rates, rates of perinatally acquired AIDS for infants per 100,000 births were calculated by using natality data from CDC's National Center for Health Statistics for births from 1992 through June 1995 (the latest birth cohort for which estimates are reliable).

#### Perinatal HIV Surveillance

A total of 29 states conducted surveillance for HIV infection among children. These states reported 28% of the cumulative perinatally acquired AIDS cases through September 1997. In these states, perinatally exposed children are monitored to determine their HIV-infection and AIDS status, dates of maternal HIV tests, receipt of prenatal care, and maternal and neonatal use of ZDV and other antiretrovirals during pregnancy. Of children born to HIV-infected mothers from 1993 through 1996, these states reported 4325 children who had perinatally acquired AIDS (344) or HIV infection but without AIDS (487) or who were uninfected or indeterminate (3494). Since the PHS guidelines were issued in August 1994, 2027 (87%) HIV-infected mothers of children reported in these states had HIV infection diagnosed before or at the child's birth and 179 (8%) after the child's birth; the timing of HIV infection diagnosis was unknown for 121 (5%) (Figure 1). For children born from 1994 through 1996, the proportion of HIV-

<sup>\*</sup>Single copies of this report will be available until November 21, 1998, from the CDC National AIDS Clearinghouse, P.O. Box 6003, Rockville, MD 20849-6003; telephone (800) 458-5231 or (301) 519-0023.

FIGURE 1. Percentage of mothers of perinatally HIV-exposed/infected children whose HIV infection was diagnosed before or after their child's birth or at an unknown time, by quarter year of child's birth — 29 HIV-reporting states\*, 1993–1996<sup>†</sup>



<sup>\*</sup>Alabama, Arizona, Arkansas, Colorado, Connecticut, Idaho, Indiana, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Nevada, New Jersey, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, West Virginia, Wisconsin, and Wyoming.

<sup>†</sup>In 1993, n=1169; in 1994, n=1098; in 1995, n=1095; and in 1996, n=963.

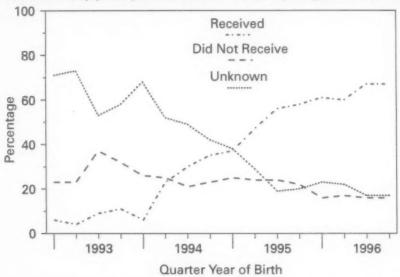
infected mothers who were prescribed prenatal ZDV increased from 24% to 64% (Figure 2). Compared with the expected number of children born to HIV-infected women estimated from the SCBW, as of September 1997, states with HIV surveillance<sup>†</sup> identified a median of 64% of children born in 1995 compared with a median of 3% in states with AIDS reporting only.

# **Characteristics of Perinatally Acquired AIDS Cases**

As of September 30, 1997, perinatal transmission of HIV accounted for 7310 (1%) of the 626,334 total AIDS cases in adults and children reported to CDC by state and territorial health departments. Perinatally acquired cases have been reported from 48 states, the District of Columbia, Puerto Rico, and the Virgin Islands. Five states and/or territories accounted for 64% of all perinatally acquired AIDS cases: New York

<sup>†</sup>Pediatric HIV reporting areas that conducted the SCBW were Alabama, Arizona, Arkansas, Colorado, Connecticut, Indiana, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nevada, New Jersey, North Carolina, Ohio, Oklahoma, Oregon, South Carolina, Tennessee, Texas, Utah, Virginia, West Virginia, Wisconsin, and Wyoming. The four HIV reporting areas that did not conduct the SCBW were Idaho, Nebraska, North Dakota, and South Dakota.

FIGURE 2. Percentage of mothers of perinatally HIV-exposed/infected children who did or did not receive prenatal zidovudine (ZDV) therapy or for whom receipt of ZDV was unknown, by quarter year of child's birth — 29 HIV-reporting states,\* 1993–1996<sup>†</sup>



\*Alabama, Arizona, Arkansas, Colorado, Connecticut, Idaho, Indiana, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Nevada, New Jersey, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, West Virginia, Wisconsin, and Wyoming.

<sup>†</sup>In 1993, n=1169; in 1994, n=1098; in 1995, n=1095; and in 1996, n=963.

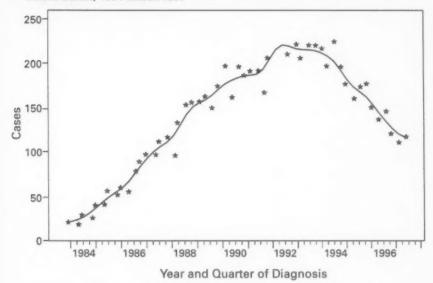
(27%); Florida (17%), New Jersey (9%), California (6%), and Puerto Rico (5%). The Northeast (44%) and the South (36%) accounted for most (80%) such cases; 85% of cases were diagnosed in metropolitan areas with a population of >500,000 persons and 9% in metropolitan areas with populations of 50,000–500,000 persons.

Of the 7310 children with perinatally acquired AIDS, 4461 (61%) were non-Hispanic black, 1723 (24%) were Hispanic, 1057 (14%) were non-Hispanic white, and 54 (<1%) were either Asian/Pacific Islander or American Indian/Alaskan Native; 15 were of unknown race/ethnicity. The median age at diagnosis was 17 months, with 40% of cases diagnosed in children aged <1 year; 47%, in children aged 1–5 years; and 13%, in children aged ≥6 years.

# Trends in Perinatally Acquired AIDS

From 1984 through 1992, the estimated number of children with perinatally acquired AIDS diagnosed each year increased, then declined 43% during 1992–1996 (Figure 3). From 1992 to 1996, declines were similar by race/ethnicity, regions of the

FIGURE 3. Number of perinatally acquired AIDS cases,\* by quarter year of diagnosis — United States, 1984–March 1997



\*Estimates were based on cases reported through September 1997, adjusted for reporting delay and unreported risk but not for incomplete reporting of diagnosed AIDS cases. Points represent estimated quarterly incidence, and the line represents "smoothed" incidence.

United States, and in urban and rural areas (Table 1). Declines were largest among children for whom AIDS was diagnosed at younger ages (<5 years).

When the analysis was restricted to children diagnosed with perinatally acquired AIDS at age <1 year, for birth years 1992 through 1995, the estimated numbers of cases diagnosed in infants was highest among 1991–1992 birth cohorts, then declined 42% from the first half of the 1992 birth cohort (n=172) to the first half of the 1995 birth cohort (n=100). From the first half of the 1995 birth cohort, the incidence declined 39%, from 8.4 per 100,000 births to 5.1.

Reported by: State, territorial, and local health depts. Div of HIV/AIDS Prevention–Surveillance and Epidemiology, National Center for HIV, STD, and TB Prevention, CDC.

Editorial Note: This report documents the rapid implementation of recommended HIV counseling and voluntary testing practices and the increasing use of ZDV therapy by health-care providers and use of these services and care by HIV-infected mothers in the United States. The implementation of these recommendations has been temporally associated with a substantial and geographically widespread decline in perinatally acquired AIDS in the United States among all racial/ethnic groups and in both urban and rural areas, particularly since 1994, most likely reflecting the effectiveness of ZDV in reducing perinatal HIV transmission.

TABLE 1. Estimated number of children with perinatally acquired AIDS, by selected characteristics, year of diagnosis, and percentage change from 1992 to 1996 — United States, 1992–1996\*

			Year			% Change	
Characteristic	1992	1993 1994		1995	1996	1992 to 199	
Race/Ethnicity†							
White, non-Hispanic	133	126	92	95	67	-50%	
Black, non-Hispanic	566	531	522	415	331	-42%	
Hispanic	195	195	166	146	111	-43%	
Age at AIDS diagnosis							
<5 years	733	693	613	459	360	-51%	
≥5 years	168	169	179	202	156	- 7%	
Region <sup>§</sup>							
Northeast	361	379	315	265	212	-41%	
South	362	315	332	243	223	-38%	
Midwest	60	74	54	67	30	-50%	
West	67	58	65	60	35	-48%	
Metropolitan statistical area							
>500,000 population	748	732	675	558	450	-40%	
50,000-500,000 population	102	75	75	62	41	-60%	
<50,000 population	51	53	42	39	22	-57%	

\*Diagnosed through 1996 and reported through September 1997 adjusting for reporting delays and unreported risk.

Numbers for other racial/ethnic groups were too small for meaningful analysis.

\*Northeast=Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont; South=Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia; West=Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming; and Midwest=Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.

The findings from states that conduct HIV surveillance indicate that most HIV-infected mothers were tested for HIV before their child's birth and confirm the effectiveness of current PHS guidelines for routine HIV counseling and voluntary testing of pregnant women. Previous assessments also have demonstrated high acceptance levels following counseling by informed providers (4). Documentation of the increasing use of ZDV therapy among mothers following publication of PHS guidelines is consistent with other assessments noting the increased use of ZDV by pregnant HIV-infected women and their newborns that was associated with reduced rates of perinatal transmission (6).

Declines in perinatally acquired AIDS began before 1994, most likely reflecting increased use of ZDV to treat HIV-infected women (6). Other factors possibly contributing to the decline include decreases in the number of HIV-infected women giving birth and increases in use of prophylaxis for *Pneumocystis carinii* pneumonia (PCP) and in antiretroviral treatment for HIV-infected children. However, from 1992 to 1994, the number of children born to HIV-infected mothers was relatively stable (i.e., 6000–7000 per year) (2). At the same time, incidence of PCP among infants did not decrease

substantially (5). Because many new antiretroviral agents have not been approved for use in children, the recent declines in perinatally acquired AIDS probably do not yet reflect potent combination therapy with protease inhibitors (7).

Even though this report confirms the effectiveness of prevention efforts, the continued incidence of perinatally acquired AIDS among infants documents ongoing perinatal transmission and underscores the need for strategies to ensure that women receive adequate prenatal care, timely HIV counseling, and voluntary testing; gain access to HIV-related care and services; receive chemoprophylaxis to reduce perinatal transmission; and avoid breastfeeding. These findings especially emphasize the need to focus on increasing access to care and providing prevention services to minority populations, among whom rates of AIDS have been highest (i.e., non-Hispanic blacks and Hispanics) (1).

Through the Ryan White CARE Act, the U.S. Congress allocates resources for care and services for HIV-infected persons. This act requires that states evaluate their perinatal HIV-prevention efforts through the use of HIV-infection and AIDS surveillance. The most timely evaluation of prevention efforts in states with and without HIV surveillance is analysis of AIDS incidence among infants. States should evaluate trends in rates of perinatally acquired AIDS among infants per 100,000 births. Data on perinatal AIDS incidence can assist states in the identification of reasons for continued perinatal transmission, including missed opportunities for prevention or failures of recommended therapy (e.g., because of antiviral resistance or inadequate adherence).

CDC recommends that, as an extension of AIDS surveillance programs, all states and territories conduct surveillance for perinatal HIV exposure with follow-up to determine HIV-infection and AIDS status. Surveillance for HIV exposure and infection and AIDS would enable timely and complete monitoring of the effectiveness of perinatal prevention efforts (8); HIV incidence trends; identification of groups in which prevention strategies are less successful; evaluation of the impact of ZDV on perinatal HIV incidence; assessment of resources required to provide care for HIV-exposed children; the timeliness of receipt of HIV-related care; and potential short- or long-term adverse effects of in utero exposure to ZDV and other antiretroviral therapy. In addition, the Council of State and Territorial Epidemiologists has recommended that all states conduct surveillance for pediatric HIV/AIDS and perinatal exposure and, in 1995, declared pediatric HIV infection a nationally notifiable disease. The American Academy of Pediatrics also supports surveillance efforts to monitor perinatally exposed and infected children (9).

Substantial decreases in perinatal transmission of HIV have been documented in the United States and in some European countries (10); however, most HIV-infected children are born in developing countries. The Joint United Nations Program on HIV/AIDS (UNAIDS) estimates that each year 350,000 children in developing countries are infected with HIV through perinatal transmission. The reduction of perinatal transmission of HIV in the United States underscores the need to identify and evaluate safe, effective regimens that are logistically and economically feasible in developing countries.

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## Laboratory-Based Surveillance for Rotavirus — United States, July 1996–June 1997

Rotavirus infections are the most common cause of severe gastroenteritis among infants and young children worldwide (1,2). Each year in the United States, rotavirus infections account for an estimated 3.5 million cases of diarrhea, 500,000 physician visits, 50,000 hospitalizations, and 20 deaths among children aged <5 years (2). In addition, rotavirus accounts for 30%–50% of U.S. hospitalizations for diarrhea among children aged <5 years, including approximately 50% of hospitalizations for diarrhea during annual seasonal peaks, and is an important cause of nosocomial gastroenteritis (3). Rotavirus activity in the United States is monitored by the National Respiratory and Enteric Virus Surveillance System (NREVSS), a voluntary, laboratory-based system (4). This report summarizes surveillance from NREVSS during July 1996–June 1997.

From July 1996 through June 1997, a total of 69 laboratories in 42 states participated in NREVSS and reported weekly to CDC the number of stool specimens tested for rotavirus by antigen-detection and electron microscopy methods and the number of positive results. Of 23,199 fecal specimens examined, 6183 (27%) were positive for rotavirus. Timing of rotavirus activity varied by geographic location; peak activity occurred first in the Southwest in November 1996 and last in the Northeast in April and May (Figure 1).\* Data from Alaska and Hawaii were not available.

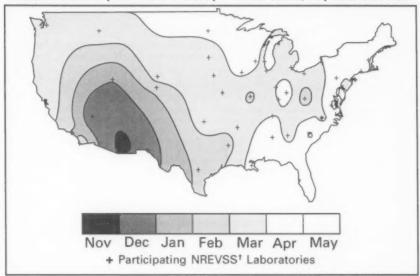
Reported by: MT Bosley, Georgia Institute of Technology, Atlanta, Georgia. National Respiratory and Enteric Virus Surveillance System collaborating laboratories; Viral Gastroenteritis Section, Respiratory and Enteric Viruses Br, and Office of the Director, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases, CDC.

Editorial Note: Seasonal increases in rotaviral diarrhea occur annually throughout the United States, and the temporal and geographic trends during the July 1996–June

<sup>\*</sup>A short animation showing rotavirus activity by week is available on the World-Wide Web at ftp://ftp.cdc.gov/pub/Publications/mmwr/wk/rota9697.gif.

Rotavirus — Continued

FIGURE 1. Month of peak rotavirus activity — United States, July 1996-June 1997\*



<sup>\*</sup>To create this figure, the peak in rotavirus activity from each laboratory was mapped using kriging, a modeling technique originally developed for geostatistics (4). A short animation showing rotavirus activity by week is available on the World-Wide Web at ftp://ftp.cdc.gov/pub/Publications/mmwr/wk/rota9697.gif.

<sup>†</sup>National Respiratory and Enteric Virus Surveillance System.

1997 reporting period were similar to trends in previous years (4). The timing of rotavirus activity is sequential, beginning first in the Southwest in autumn and ending in the Northeast in mid- to late-spring; however, the time of peak activity in the Pacific Northwest is more variable than in other regions, occurring from winter to late spring. The reasons for the sequential pattern in rotavirus activity across the United States are unknown; it is not explained by a sequential introduction and diffusion of new rotavirus strains because rotavirus activity often is caused by a mixture of common strains that may vary between cities (5,6).

NREVSS is the largest, nationally representative system for surveillance of rotavirus infections in the United States (4). This system uses an automated telephone reporting system to transmit reports from participating laboratories to CDC and allows timely analysis of rotavirus trends. Limitations of the system are that 1) some regions of the country are sparsely represented, and data are not reported from Alaska and Hawaii; 2) demographic or clinical data are not collected; and 3) specimens are not routinely submitted for confirmation or strain characterization.

The large disease burden and high cost associated with rotavirus infections in the United States have been the impetus for development of rotavirus vaccines. Two human-animal reassortant vaccines have been found to be safe and effective (7–10), and a vaccine is under review for licensure for use among U.S. children; both the

#### Rotavirus - Continued

Advisory Committee of Immunization Practices and the Committee on Infectious Diseases of the American Academy of Pediatrics are considering recommendations for the use of the vaccine in children.

The prospect of a program for childhood vaccination against rotavirus in the United States highlights the need for continued surveillance for this infection. Laboratory-based surveillance has helped characterize the spatiotemporal trends of rotavirus infections and provides a baseline for monitoring changes in the epidemiology of these infections following vaccine introduction. Efforts to enhance rotavirus surveillance should include surveillance for rotavirus-associated diarrheal outcomes, particularly hospitalizations, and for rotavirus strains. These measures also will assist in assessing vaccine program effectiveness and the potential emergence of novel or unusual rotaviruses.

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# Update: Influenza Activity — United States, 1997-98 Season

CDC conducts surveillance for influenza viruses and related disease activity in collaboration with the World Health Organization (WHO), its collaborating laboratories, and state and local health departments. This report summarizes influenza surveillance data in the United States from September 28, 1997, through the week ending November 8, and describes two recent cruise ship outbreaks of influenza. The findings indicate that, during this period, influenza activity in the United States was low and that influenza A predominated.

# Influenza Activity — Continued

Maryland reported the first U.S. regional influenza activity\* during the week ending October 25. Through the week ending November 8, two states (Maryland and New York) reported regional activity. Since September 28, the percentage of patient visits to sentinel physicians for ILI has remained under baseline levels (0-3%), and the percentage of deaths attributed to pneumonia and influenza (P&I) reported by the vital statistics offices of 122 cities has not exceeded the epidemic threshold. During September 28-November 8, a total of 20 (0.5%) of 4477 specimens tested (by culture or direct antigen techniques) for respiratory viruses at WHO collaborating laboratories in the United States were positive for influenza virus. Of the 20 positive specimens, 19 were influenza type A, and one was type B; all influenza A isolates subtyped have been A(H3N2). Among specimens collected since September 21 and characterized by CDC (none of which came from WHO collaborating laboratories), one was an A/Nanchang/933/95-like(H3N2) virus antigenically similar to the H3N2 component in the 1997-98 influenza vaccine, and three isolates from a nursing home outbreak in Hawaii were related to A/Sydney/05/97(H3N2) (Table 1). A/Sydney/05/97-like viruses were first detected in June in Australia and New Zealand. In Australia, these viruses have accounted for 146 (29.0%) of 503 total influenza A(H3N2) isolates. A/Sydnev/05/97-like viruses have been identified among isolates from Australia, New Zealand, Hong Kong, Hawaii, Puerto Rico, and a cruise ship outbreak. As of November 8,

TABLE 1. Hemagglutination-inhibition titers of influenza type A(H3N2) viruses with serum specimens from infected ferrets\*

		Ferret antiserum	
Viral antigen	A/Wuhan/359/95	A/Nanchang/933/95	A/Sydney/05/97
Reference antigens			
A/Wuhan/359/95	1280	1280	160
A/Nanchang/933/95	1280	2560	160
A/Sydney/05/97	160	160	1280
Recent isolates			
A/Canada/11/971	80	80	1280
A/Hawaii/05/97 <sup>§</sup>	80	80	2560
A/Guangzhou/133/97	1280	2560	320
A/Chile/3252/97	640	1280	320
A/Hawaii/06/97¶	640	1280	320

<sup>\*</sup>A fourfold or greater difference in hemagglutination-inhibition titers between two viruses is indicative of antigenic variation between viruses.

<sup>\*</sup>Levels of activity are 1) no activity; 2) sporadic—sporadically occurring influenza-like illness (ILI) or culture-confirmed influenza with no outbreaks detected; 3) regional—outbreaks of ILI or culture-confirmed influenza in counties with a combined population of <50% of the state's total population; and 4) widespread—outbreaks of ILI or culture-confirmed influenza in counties with a combined population of ≥50% of the state's total population.

<sup>&</sup>lt;sup>†</sup>The epidemic threshold is 1.645 standard deviations above the seasonal baseline. The expected seasonal baseline is projected using a robust regression procedure in which a periodic regression model is applied to observed percentages of deaths from P&I since 1983.

<sup>&</sup>lt;sup>†</sup>Virus identified in cruise ship A outbreak.

Virus identified in a nursing home outbreak in Hawaii.

Virus identified in cruise ship B outbreak.

Influenza Activity - Continued

five outbreaks of influenza have been reported to CDC, including the following on two cruise ships.

# Cruise Ship A Outbreak

On September 10, 1997, Health Canada notified CDC that on a cruise from New York City to Montreal (cruise ship A) during August 31–September 10, a total of 39 (2.7%) of 1445 passengers and three (0.5%) of 631 crew members presented to the ship's infirmary because of acute febrile respiratory illness. All passengers disembarked in Montreal; nine (0.6%) were referred to area hospitals for respiratory complications. Influenza A was confirmed by culture.

On September 11, a new cohort of 1448 passengers boarded the same ship for the return voyage to New York City; the crew did not change. During September 11–20, a total of 19 (1.3%) passengers and 17 (2.7%) crew members presented to the infirmary because of ILI (fever ≥100 F [≥38 C] and either sore throat or cough). On September 15, public health officials from Health Canada and CDC boarded the ship in Canada to investigate the outbreak and advise ship officials on control measures. On September 17, one nasopharyngeal swab was positive for influenza A by a rapid viral antigen detection test. Active surveillance for ILI was instituted among the crew; those with ILI were confined to their cabins and started on rimantadine. All non-ill crew members were started on rimantadine prophylaxis for 14 days. All 631 crew members were administered the 1997–98 influenza vaccine. On September 17, all passengers on the second cruise were notified of the outbreak, and non-ill passengers were offered rimantadine prophylaxis. Passengers presenting to the infirmary with ILI were given rimantadine for 5 days.

Based on a survey of 1284 passengers during September 17–18, a total of 994 (77.4%) were aged ≥65 years, 336 (26.2%) had chronic health conditions associated with increased risk for severe complications of influenza, 52 (4.1%) reported an ILI, and 1020 (80.8%) of 1262 passengers reported using rimantadine prophylaxis. On September 20, two (0.1%) passengers who disembarked in New York City were referred to area hospitals for respiratory complications. Thirteen isolates received at CDC for viral culture were characterized as influenza A/Sydney/05/97-like(H3N2) (Table 1). On September 20, a new group of passengers boarded in New York City; this group was notified of the previous outbreaks. During September 21–24, no new cases of ILI were detected.

# Cruise Ship B Outbreak

On October 15, cruise ship B reported to CDC an outbreak of acute respiratory illness on a cruise from Tahiti to Hawaii. During October 6–18, a total of 48 (3.3%) of 1443 passengers and 16 (2.5%) of 639 crew members presented to the ship's infirmary because of acute respiratory illness. Eight (0.6%) passengers had pneumonia diagnosed; one was hospitalized. Influenza A was confirmed by rapid antigen detection and by culture.

On October 18, a new cohort of 1477 passengers, most unvaccinated, boarded the ship in Honolulu and were informed of the outbreak. Active surveillance was initiated among the crew, and influenza vaccine was administered to 631 (97.8%) of 645 crew members. Rimantadine was administered to all non-ill crew members. During October 18–27, a total of 29 (2.0%) passengers and 39 (6.0%) crew members reported acute respiratory illness. Ill crew members were confined to their cabins and administered

Influenza Activity - Continued

rimantadine for 5 days. III passengers were offered rimantadine treatment. There were no reported severe complications. One isolate received at CDC was characterized as influenza A/Nanchang/933/95-like(H3N2), antigenically similar to the H3N2 component in the 1997–98 influenza vaccine.

Reported by: T Tam, MD, J Hockin, MD, Field Epidemiology Training Program; D Kertesz, MD, Div of Respiratory Diseases, Bur of Infectious Diseases; R Nowak, MD, T Nguyen, MHA, Quarantine Health Svcs; R St John, MD, Office of Special Health Initiatives; L Ouellette, MEd, G Lynch, MD, Occupational and Environmental Health Svcs, Health Canada, Ottawa; M Libman, MD, Montreal General Hospital, Montreal; P René, MD, Royal Victoria Hospital, Montreal; M Miller, MD, Jewish General Hospital, Montreal; J MacDonald, MD, Montreal Children's Hospital, Montreal; J Carsley, MD, Disease Control, L Mathieu, Occupational and Environmental Health Svcs, Quebec District, F Saintonge, MD, L Valiquette, MD, P Leguerriur, MD, Infectious Disease Unit, Montreal Regional Public Health Dept, Canada. S Kuhr, Mayor's Office of Emergency Management, New York; JR Miller, MD, Bur of Communicable Diseases, F Winters, New York City Dept of Health. KF Gensheimer, MD, State Epidemiologist, Bur of Health, Maine Dept of Human Svcs. MA Barry, MD, Communicable Disease Control, Boston Public Health Commission, Boston Massachusetts. U Bandy, MD, Rhode Island Dept of Health. R Ueki, G Kunimoto, Virology Section, State Laboratories Div; C Wakida, M Ching-Lee, MPH, PV Effler, MD, State Epidemiologist, Hawaii State Dept of Health. Participating state and territorial epidemiologists and state public health laboratory directors. World Health Organization Collaborating Center for Reference and Research on Influenza, Parkville, Australia. World Health Organization collaborating laboratories. Div of Quarantine and Influenza Br, Div of Viral and Rickettsial Diseases, National Center for Infectious Diseases, CDC.

Editorial Note: The overall level of influenza activity in the United States as described in this report is typical for fall months. During September 28–November 8, all but one of the 20 influenza viruses reported by U.S. WHO collaborating laboratories were influenza A, and all subtyped isolates were A(H3N2). Influenza A(H3N2) virus infections have been associated with increased morbidity and mortality among the elderly (1–3); the increased risk underscores the need for all elderly and other persons at high risk for complications of influenza to receive influenza vaccination.

The primary characteristics of the two cruise ship outbreaks described in this report were 1) most passengers on both ships were aged ≥65 years and were at risk for severe influenza-related complications; 2) most crew members and passengers on both ships were unvaccinated; and 3) control measures on both ships included the combination of active surveillance, cohorting of ill crew members, vaccination of crew members, and use of antiviral therapies to treat cases and to prevent disease in non-ill persons; these measures were successful in controlling the outbreak (4).

The influenza strain identified from cruise ship A (A/Sydney/05/97-like [H3N2]) is related but antigenically distinguishable from A/Nanchang/933/95, which is the A(H3N2) component included in the 1997-98 influenza vaccine. This antigenic variant has not yet been detected in Africa, Europe, South America, or in the continental United States, and the extent to which this variant will circulate during the 1997-98 season cannot be predicted. In addition, the effect of this virus' circulation on vaccine effectiveness is also unknown. However, because vaccine effectiveness is dependent, in part, on the match between the vaccine and circulating strains, protection could be less than optimal if this variant circulates widely (5-7). Even when vaccine and epidemic strains match closely, outbreaks can occur among vaccinated groups. When feasible, measures should be taken to reduce contact between symptomatic and asymptomatic persons during outbreaks. In addition, chemoprophylaxis of all non-ill persons with antiviral drugs rimantadine or amantadine should be considered during

#### Influenza Activity - Continued

influenza A outbreaks in closed or semi-closed settings where persons at risk for influenza-related complications may be in close proximity (e.g., nursing homes and cruise ships); contingency planning is needed to ensure rapid administration of rimantadine or amantadine. These drugs also can be used to reduce the severity and shorten the duration of influenza A illness when treatment is initiated within 48 hours of illness onset (4).

Throughout the season, influenza surveillance data are updated weekly and are available through CDC's fax information system, telephone (888) 232-3299, by requesting document number 361100, or through CDC's National Center for Infectious Diseases, Division of Viral and Rickettsial Diseases, Influenza Branch World-Wide Web site http://www.cdc.gov/ncidod/diseases/flu/weekly.htm. Information about local influenza activity is available from some county and state health departments.

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# Notice to Readers

# Approval of Installation of Air Bag On-Off Switches For Certain Motor-Vehicle Owners

On November 18, 1997, the U.S. Department of Transportation (DOT) announced a final rule that allows vehicle owners who meet certain qualifying criteria to have air bag on-off switches installed in their vehicles beginning January 19, 1998.\* The on-off switch can be installed for the driver, passenger, or both. Owners who certify that they or another occupant of their vehicle are in one of four identified risk groups can request and receive authorization from the National Highway Traffic Safety Administration (NHTSA) to have a switch installed. Additional information is available from NHTSA's World-Wide Web site (http://www.nhtsa.dot.gov) or from the DOT Auto Safety Hotline ([800] 424-9393), where copies are available of the brochure Air Bags & On-Off Switches: Information for an Informed Decision and the form Request for Air

<sup>\*49</sup> CFR Parts 571 and 595.

Notices to Readers — Continued

Bag On-Off Switch. These materials also will be available at state motor-vehicle offices, automobile clubs, and some new car dealerships.

Reported by: National Highway Traffic Safety Administration. Div of Unintentional Injury Prevention, National Center for Injury Prevention and Control, CDC.

Editorial Note: Air bags are effective in reducing many deaths and injuries in moderately severe frontal impact crashes (1). However, air bags also have posed special risks for children and short-stature persons who may be sitting too close to either the steering wheel or the dash board at the time of deployment (2.3).

Because air bags are designed to supplement the use of lap and shoulder belts and not to replace them, air bags alone do not protect occupants in every type of crash (e.g., rollover crashes). Combination lap and shoulder belts and child safety seats remain the most effective occupant-protection devices available. Therefore, all occupants of a motor vehicle should use combination lap and shoulder belts consistently, and all children aged ≤12 years should be transported in the back seat in age- and size-appropriate restraints. Regardless of whether the vehicle has an air bag and whether a vehicle owner or operator decides to install an on-off switch, the rear seat is the safest seating position.

The decision to have an on-off switch installed must be in accordance with the DOT ruling. If a switch is installed, however, drivers must exercise discretion when deciding to turn it on or off and must understand both the circumstances in which the air bag poses unusual injury risks and when the air bag can provide additional protective benefits. Because the occurrence of crashes with air bag deployment cannot be predicted, drivers and front-seat passengers should always position themselves as far back from the air bag as possible, and all occupants should be properly restrained at all times.

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# Notice to Readers

# Publication of Summary of Notifiable Diseases — United States, 1996

CDC has released the Summary of Notifiable Diseases, United States, 1996 (1). This publication contains summary tables of the official statistics for the reported occurrence of notifiable infectious diseases during 1996, which are compiled from reports to CDC's National Notifiable Diseases Surveillance System. Data for 1996 are presented in tables by month; geographic location; and patient sex, age, and race/ethnicity, and in maps and charts for many conditions. Also included are a brief history of notifiable disease reporting, highlights of important developments in the reported occurrences of selected notifiable and non-notifiable diseases, data from the Public

#### Notices to Readers - Continued

Health Laboratory Information System, and short statements under each map or graph that underscore important public health messages. Tables presenting historical notifiable disease data since 1967 also are included, as is a table on deaths associated with specified notifiable diseases reported to CDC's National Center for Health Statistics.

The Summary of Notifiable Diseases, United States, 1996, is available from CDC's World-Wide Web site at http://www.cdc.gov/epo/mmwr/mmwr snd.html.

#### Reference

1. CDC. Summary of notifiable diseases, United States, 1996. MMWR 1996;45(no. 53).

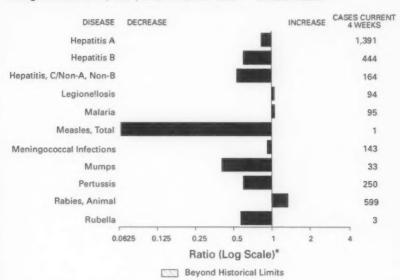
# Notice to Readers

# **Epidemiology in Action: Intermediate Methods Course**

CDC and Emory University will cosponsor a course, "Epidemiology in Action: Intermediate Methods," during February 9–13, 1998, at CDC. The course will review the fundamentals of descriptive epidemiology and biostatistics, analytic epidemiology, and Epi Info software, but will focus on mid-level epidemiologic methods directed at strengthening participants' quantitative skills, with an emphasis on up-to-date data analysis. Topics include advanced measures of association, normal and binomial distributions, logistical regression, field investigations, and summary of statistical methods. Prerequisite is an introductory course in epidemiology, such as "Epidemiology in Action," or any other introductory class. There is a tuition charge.

Deadline for applications is January 5, 1998. Additional information and applications are available from Department PSB, Rollins School of Public Health, Emory University, 7th floor, 1518 Clifton Road, N.E., Atlanta GA 30322; email ogostan@sph.emory.edu; telephone (404) 727-3485; fax (404) 727-4590.

FIGURE I. Selected notifiable disease reports, comparison of provisional 4-week totals ending November 15, 1997, with historical data — United States



\*Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary — provisional cases of selected notifiable diseases, United States, cumulative, week ending November 15, 1997 (46th Week)

	Cum. 1997		Cum. 1997
Anthrax Brucellosis	68	Plague Poliomyelitis, paralytic	3
Cholera	0	Psittacosis	38
Congenital rubella syndrome	4	Rabies, human	2
Cryptosporidiosis*	1,721	Rocky Mountain spotted fever (RMSF)	377
Diphtheria	5	Streptococcal disease, invasive Group A	1,219
Encephalitis: California®	106	Streptococcal toxic-shock syndrome*	29
eastern equine*	7	Syphilis, congenital <sup>¶</sup>	525
St. Louis*	13	Tetanus	40
western equine*	-	Toxic-shock syndrome	115
Hansen Disease	96	Trichinosis	8
Hantavirus pulmonary syndrome*7	96 16 58	Typhoid fever	314
Hemolytic uremic syndrome, post-diarrheal* MIV infection, pediatric*5	58 197	Yellow fever	

ino reported cases

\*Not notifiable in all states.

"Not notifiable in all states."

'Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (NCID).

'Updated monthly to the Division of HIV/AIDS Prevention, Surveillance, and Epidemiology, National Center for HIV, STD, and TB Prevention (NCHSTP), last updated Cotober 28, 1997.

'Updated from reports to the Division of STD Prevention, NCHSTP.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending November 15, 1997, and November 16, 1996 (46th Week)

	AID	is.	Chlan	nvdia	cali O1		Gono	rrhea	Hepa C/NA	
Reporting Area	Cum. 1997°	Cum. 1996	Cum. 1997	Cum. 1996	Curn. 1997	Cum. 1997	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996
INITED STATES	49,050	58,613	407,411	378,562	2,148	1,312	253,772	283,588	2,766	3.086
	2,112	2,440	15,477	15,270	187	118	5.114	5,657	51	93
IEW ENGLAND	50	38	885	818	17		60	50		
I.H.	35	73	709	668	12	14	83	146	8	7
Mr.	32	18	376	345	8	3	46	42	2	24
Aass.	734	1,248	6,529	6,129	100	86	1,915	1,909	34	56
I.I.	133	158	1,644	1,652	10	15	369	3,069	7	6
Conn.	1,128	905	5,334	5,658	40		2,641			
MID. ATLANTIC	15,008	16,086	53,403	51,849	129	45	32,891	37,926	315 239	262 213
Jpstate N.Y.	2,274	2,267	27.973	25,098	89 11	7	5,408	6,562 12,236	239	3
N.Y. City	8,026 2,903	8,680 3,178	8,156	11,105	29	23	6,232	7,946	-	-
N.J. Pa.	1,805	1,981	17,274	15,646	N	15	8,507	11,182	76	46
	-				382	232	37,720	52,650	444	422
E.N. CENTRAL	3,578 724	4,511	61,320 17,420	75,964 18,399	102	48	10,915	13,465	17	32
Ohio ind.	462	493	8,110	8,926	74	40	5,334	5,734	10	8
nu. II.	1,523	1,980	9,612	21,196	64	-	4,701	15,091	69	82
Mich.	641	778	18,229	18,163	142	100	13,231	13,988	348	300
Wis.	228	241	7,949	9,280	N	44	3,539	4,372		
W.N. CENTRAL	964	1,317	26,317	27,971	509	380	11,747	13,522	144	86
Minn.	177	260	4,507	4,494	219	185	1,606	1,881	4	4
lowa	93	80	3,943	3,801	114	73	1,018	1,004	29	38
Mo.	452	669	10,591	11,061	53	66	6,573	7,657	95	22
N. Dak.	13	11	623	837	15	12	44	28	3	
S. Dak.	8	11	1,134	1,288	28 58	32	129 867	163 967	3	-
Nebr.	137	87 199	2,088 3,431	2,516 3,974	22	12	1,510	1,822	10	15
Kans.							79.275	82,927	243	176
S. ATLANTIC	12,066 194	14,676 247	80,159 1,276	44,641 1,148	197	128	1,099	1,287	243	1/0
Del. Md.	1.741	2,150	6,505	1,146 U	23	12	11,386	9,948	17	
D.C.	895	1,132	N	N	2	**	3,930	3,999		
Va.	1,011	973	10,215	10,367	N	41	7,651	8,192	24	10
W. Va.	112	102	2,592	1,937	N N	1	836	710	16	5
N.C.	761	748	16,273	U	68	34	16,028	16,722	47	45
S.C.	698	715	11,079	U	9	7	10,273	10,161	37	21
Ga.	1,468	2,066	10,771	11,051	41	29	12,543 15,529	16,391 15,517	102	79
Fla.	5,186	6,543	21,448	20,138						
E.S. CENTRAL	1,749	1,926	28,530	28,585	93	36	28,689	31,821 3,777	308 12	52:
Ky.	319	346	5,545 11,295	5,935 11,975	30 46	36	3,584 9,861	10,636	217	36
Tenn. Ala.	684 456	702 511	7,513	7.494	14	30	10.506	11,994	11	30
Miss.	290	367	4,177	3,181	3		4,738	5,414	68	12
W.S. CENTRAL	5,206	6,240	54,339	47,354	67	16	35,548	33,013	445	34
Ark.	193	245	2.099	1,590	9	5	3,484	3,620	8	
La.	899	1.334	8.893	6,532	6	3	8,666	7,083	202	19
Okla.	256	245	6,549	6,614	10	5	4,244	4,329	7	
Tex.	3,858	4,416	36,798	32,618	42	3	19,154	17,981	228	13
MOUNTAIN	1,409	1,760	21,444	23,055	231	134	7,505	6,731	419	51
Mont.	36	34	902	1,096	23		37	34	21	1
Idaho	48	35	1,470	1,361	35	23	133	93	63	9
Wyo.	13	6	531	536	16	12	46	38	204	16
Colo.	332	434	1,896	3,087	81	57	1,989	1,273	35 51	5
N. Mex.	145 348	154 535	2,774	3,521 9,438	N	6 26	1,011 3,518	3,268	25	6
Ariz. Utah	119	171	1,515	1,397	58	20	243	261	5	1
Nev.	368	391	1,855	2,619	11	10	528	953	15	1
		9,656		63,873	353	220	15,283	19,341	397	66
PACIFIC Wash.	6,958 576	9,656	86,422 8,133	8,317	113	54	1,722	1,847	24	5
Oreg.	261	411	4,394	4.747	74	83	659	747	3	
Calif.	6.004	8,412	51,048	48,102	155	73	12,140	15,946	230	42
Alaska	37	28	1,330	1,110	11	3	329	387	-	
Hawaii	80	170	1,517	1,597	N	7	433	414	140	18
Guam	2	4	193	328	N		27	59		
P.R.	1,714	2.014	U	U	39	U	496	590	139	14
V.I.	86	17	N	N	N	U	*			
Amer. Samoa		-	*	*	N	U	*			
C.N.M.I.	1		N	N	N	U	17	11	2	

N: Not notifiable U: Unavailable : no reported cases C.N.M.L: Commonwealth of Northern Mariana Islands
"Updated monthly to the Division of HIV/AIDS Prevention, Surveillance, and Epidemiology, National Center for HIV, STD, and TB
Prevention, last update October 28, 1997.
"National Electronic Telecommunications System for Surveillance."

Public Health Laboratory Information System.

TABLE II. (Cont'd.) Provisional cases of selected notifiable diseases, United States, weeks ending November 15, 1997, and November 16, 1996 (46th Week)

	Legion	ellosis	Lyr		Mal	aria	Sypi (Primary &		Tubero	ulosis	Rabies Anima
Reporting Area	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	Cum. 1997
UNITED STATES	891	953	9,299	13,928	1,554	1,460	7,108	10,266	14,932	17,127	7,046
NEW ENGLAND	72	65	2,755	3,842	78	68	119	164	361	370	1.107
Maine	2	2	8	53	1	8	2		11	19	201
V.H.	7	4	38	46	8	3		1	15	14	37
12.	12	5	8	23	2	8		-	5	. 1	109
Mass.	23	27	313	242	29	24	59	69	217	183	24
R.I.	11	27	380	465	7	7	2	3	31	27	34
Conn.	17	N	2,008	3,013	31	18	56	91	102	126	483
MID. ATLANTIC	184	208	5,264	8,540	381	425	327	468	2,725	3,162	1,493
Jpstate N.Y.	58	67 19	2,107	3,893 385	61	77 254	34 75	67	333	1,624	1,098
N.Y. City N.J.	20	14	1,311	1,927	215 77	64	119	129 161	601	660	17
73.	97	108	1,772	2,335	28	30	99	111	380	475	22
		308	90	400	124	161	609	1,475	1,401	1,756	173
E.N. CENTRAL Ohio	263 114	96	55	25	18	13	183	549	228	273	116
Ind.	43	50	29	29	16	14	147	187	132	163	10
II.	14	31	6	10	39	78	65	407	704	906	15
Mich.	78	90	-	17	39	40	128	166	247	323	2
Wis.	14	41	U	319	12	16	86	166	90	91	
W.N. CENTRAL	70	55	143	210	58	41	155	317	479	433	423
Minn.	3	9	111	106	28	19	12	38	129	98	5
lowa	11	10	8	18	10	2	8	22	45	55	14
Mo.	32	16	17	46	11	10	104	215	207	174	2
N. Dak.	2	-	*	1	3	1	*	*	12	8	6
S. Dak.	2	2	1	-	1	2	-	**	10	17	6
Nebr. Kans.	15 5	13	2 4	5 34	1	7	5 26	10 32	17 59	21 60	7
S. ATLANTIC	114	152 11	683 69	651 170	314	273	2,873	3,406 35	2,858 18	3,151	2,82
Del. Md.	23	32	452	321	80	77	798	633	279	260	54
D.C.	4	7	9	3	19	8	102	114	88	123	-
Va.	25	37	59	48	64	49	216	352	275	282	60
W. Va.	N	N	10	11	1	5	3	9	48	50	8:
N.C.	13	12	32	63	16	27	640	954	375	443	81
S.C.	7	6	2	6	18	12	333	353	242	309	16
Ga.	1	3	7	1	45	27 64	486 275	621 335	532	570	29
Fla.	29	44	43	28	66				1,001	1,078	
E.S. CENTRAL	44	47	72	75	31	38	1,469	2,195	1,032	1,194	25
Ky.	29	9	9	26 20	8	10 14	122 665	138 754	138 357	205 409	14
Tenn. Ala.	4	5	10	8	10	6	378	485	381	370	8
Miss.	4	14	14	21	5	8	304	818	156	210	-
W.S. CENTRAL	35	23	87	108	54	51	1,090	1,589	2,126	2,206	31
Ark.	30	1	24	22	5	1	127	231	171	176	5
La.	6	2	3	6	13	7	325	445	198	196	
Okla.	7	10	25	22	8		110	162	153	154	10
Tex.	23	10	35	58	28	43	528	751	1,604	1,680	15
MOUNTAIN	61	46	20	8	62	56	189	141	434	544	17
Mont	1	1		-	2	7	-		17	18	4
ldaho	2	~	4	1	*	*	1	4	13	7	
Wyo.	1	7	4	3	2	7		2	2	6	3
Colo. N. Mex.	17	8 2	6	i	27	22	14	24	74 53	75 78	2
N. Mex. Ariz.	12	18	2	1	8	7	16 144	83	202	200	5
Utah	18	3	1	1	3	5	5	2	202	51	5
Nev.	7	7	2	2	9	6	9	19	46	109	
PACIFIC	47	49	185	94	452	347	277	611	3,496	4,311	27
Wash.	8	6	9	17	452	22	9	9	225	250	21
Oreg.			17	19	23	22	9	9	134	151	1
Calif.	38	37	157	57	375	290	257	490	2,936	3,669	24
Alaska		1	2		3	3	1		66	64	2
Hawaii	1	5	-	1	7	10	1	3	135	177	
Guam		1		*			3	3	13	75	
P.R.				-	5	2	213	194	164	182	6
V.I.	*	*	~	*		1	*		100		
Amer. Samoa		*	*		*		~	*			
C.N.M.I.							9	1	2		

TABLE III. Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending November 15, 1997, and November 16, 1996 (46th Week)

Reporting Area UNITED STATES	Cum. 1997°	Cum.	_	A		3	India	enous	Inna	orted <sup>†</sup>	T.	
UNITED STATES	1997*						111027		Total			
		1996	Cum. 1997	Cum. 1996	Cum. 1997	Cum. 1996	1997	Cum. 1997	1997	Cum. 1997	Cum. 1997	Cum 1996
BITTLE PRIME AND	921	893	24,794	25,565	7,734	8,650		70		55	125	487
NEW ENGLAND	56	32	574	372	134	192		11		8	19	16
Maine N.H.	5 9	11	57 31	21 18	6	2		10	•	1	1	
Vt.	3	1	12	11	15	17		1		•	1	-
Mass. R.I.	34	18	224	177	48	75	*	10		6	16	12
Conn.	3 2	2	126 124	20 125	14	9	*	*	*	-	-	*
MID. ATLANTIC	123	183	1,665		45	77	~	-		1	1	2
Upstate N.Y.	31	44	315	1,742	1,156 269	1,241 298	-	17	-	8	25	37
N.Y. City	32	47	605	540	401	440	-	8		3 2	5 10	11
N.J. Pa.	41 19	53 39	246 499	329 475	200	250	*	2	*		2	3
E.N. CENTRAL	142	158	2,354	2,292	286	253	*	5	*	3	8	12
Ohio	80	83	281	688	762 76	963	-	6	*	3	9	20
ind.	14	13	281	308	83	123			-		-	5
Mich,	33	44	509	677	178	306	*	6	*	1	7	3
Wis.	1	9	1,147	437 182	385 40	336 84	-		*	2	2	3
W.N. CENTRAL	58	38	1,959	2.293	404	461			*	*		9
Minn.	44	23	183	129	38	59		12		5	17	22 18
lowa Mo.	6	4	423	311	40	65		*			0	18
N. Dak.	4	8	979 10	1,215	278	267		1	*	*	1	3
S. Dak.	2	1	21	42	1	5		8				
Nebr. Kans.	1	1	100	132	15	35	-			*	8	
		1	243	346	28	28	*		-			1
S. ATLANTIC Del.	147	164	1,842	1,223	1,139	1,166	*	1	*	13	14	11
VId.	52	57	200	18 218	164	149	*		*		2	1
D.C. Va.	-	5	32	36	29	32	*			2	2	2
va. V. Va.	12	10	210	166	113	129	*	*		1	1	3
N.C.	21	24	185	157	16 235	30 281	~		*	2	-	
S.C. Ga.	4	5	98	49	90	88				1	2	2
Fla.	30 25	34 18	554 522	149	126	32		*		1	1	2
E.S. CENTRAL	49	25		416	360	416	*	1	*	5	6	1
Cy.	6	6	546 68	1,163	614 34	798	*			/ 100	*	2
lenn.	29	9	341	734	403	71 449	-	~		-	*	
Ala. Viiss.	14	9	79	182	71	70		-				2
		1	58	197	106	208	*	*				
V.S. CENTRAL	48	38	5,300	5,101	1,128	1,105		3		5	8	26
.a.	13	4	218	421 180	57 152	76 140	*	*		*	*	
Okla.	29	29	1,313	2,176	44	24		-		1	1	*
Tex.	5	5	3,563	2,324	875	865	*	3	*	4	7	26
MOUNTAIN Mont.	84	49	3,897	4,006	800	1,034	*	6		2	8	157
daho	1	1	69 123	108	11	16 85	*	*	~	*		
Vyo.	4	*	34	32	36	44			*	*	*	1
Colo. N. Mex.	14	14	380	435	137	117	*					7
Ariz.	30	16	325 2,060	330 1,538	236 182	387				*	*	17
Jtah	3	7	524	947	85	219 84	U	5	U	1	5	8
lev.	23	*	382	393	67	82		1		1	2	118
ACIFIC	214	206	6,657	7,373	1,597	1,690		14		11	25	196
Vash. Dreg.	5 29	28	584 339	665	69	92	*	1		1	2	38
Calif.	167	166	5,579	801 5,769	1,400	1,452	*				-	14
Maska	6	6	29	42	20	1,452		11		8	19	45
fawaii	7	2	126	96	10	12		2		2	4	63 36
iuam R.				7	3	1	U	*	U		-	-
C.L.	-	2	247	219	1,318	903		*	*	*		3
Amer. Samoa				34		37	U		U	*	-	
.N.M.L	6	10	1	1	34	5	Ü	1	U		1	*
: Not notifiable	U: Unav	railable	-: no rej	ported case	15							

°Of 208 cases among children aged <5 years, serotype was reported for 82 and of those, 36 were type b. <sup>†</sup>For imported measles, cases include only those resulting from importation from other countries.

TABLE III. (Cont'd.) Provisional cases of selected notifiable diseases preventable by vaccination, United States, weeks ending November 15, 1997, and November 16, 1996 (46th Week)

	Disc	ococcal		Mumps			Pertussis		Rubella		
Reporting Area	Cum. 1997	Cum. 1996	1997	Cum. 1997	Cum. 1996	1997	Cum. 1997	Cum. 1996	1997	Cum. 1997	Cum
UNITED STATES	2,814	2,891	7	520	617	55	4,443	5,660			1996
NEW ENGLAND	179	125		9	1	2	791	1.323	1	157	221
Maine	17	11	0				6	47		1	27
N.H. Vt.	15	7	*			1	121	134			
Mass.	87	55		2	1	1	210	168	*		2
R.I.	19	13	*	6		-	412 16	912		1	21
Conn.	37	35	*	1		*	26	32	-		4
MID. ATLANTIC Upstate N.Y.	285	305	2	48	79	7	322	457	1	31	13
N.Y. City	62 42	80		9	24 18	3	116	267	1	4	5
N.J.	60	62	*	5	4		59	42	-	27	5
Pa.	121	119	2	31	33	4	138	118			2
E.N. CENTRAL	401	405		64	116	×	393	676		5	3
Ohio Ind.	151	141	*	30	41		150	245			
111.	124	119		12 12	8 21	-	54	75	*		
Mich.	46	42		10	43		73	151 47	-	2	1
Wis.	31	50	*		3		72	158	-	3	2
W.N. CENTRAL	209	209	2	17	20	18	409	369			
Minn. Iowa	34 45	25 45	1	6	6	11	258	288	*		
Mo.	90	80	1	9	2 9	3	61	19		*	*
N. Dak.	2	4			2	3	59 2	36	-	-	
S. Dak. Nebr.	5	10			-	1	5	4			
Kans.	14 19	21	*	2	i	*	11	8	*		*
S. ATLANTIC	509	555		-			13	13	*	*	
Del.	5	2		69	99	4	399	605	*	83	91
Md.	42	55	*	7	31	1	112	22 244			-
D.C. Va.	9 54	5	*				3	3		1	1
W. Va.	17	55 16		10	15		42	95	*	1	2
N.C.	85	68		10	20	*	112	97		59	-
S.C. Ga.	53 98	57		11	7	2	27	41		19	77
Fla.	146	125 172		10 21	23		13	19	*	*	
E.S. CENTRAL	211	213				1	83	82	*	3	10
Ky.	45	27		25	20	1	124 53	194	*	*	2
Tenn.	75	59	*	5	1		36	140	^	*	*
Ala. Miss.	73 18	78 49	*	9	4		27	24			2
W.S. CENTRAL	272		-	8	15	1	8	9	*	*	N
Ark.	31	297 30	3	88	45		226	142		4	8
La.	47	57	1	14	13		60 18	7 9	*	*	-
Okia. Tex.	39	36	*		1		29	17			1
MOUNTAIN	155	174	2	43	30	*	119	109	*	4	7
MOUNTAIN Mont.	167	163	*	54	24	20	1,039	497		6	6
daho	10	22		3		10	19 573	34		:	-
Nyo.	4	4		1	1	*	7	101		1	2
Colo. N. Mex.	44 27	37 25		3	4	2	271	203			2
Ariz.	41	35	N	N 32	N 1	7	98	62			
Utah	15	15		8	3	0	35 18	31 21	U	5	1
Nev.	17	16	*	7	15		18	38			1
PACIFIC	581	619		176	213	3	740	1,397		27	71
Wash. Dreg.	79 116	91	0.1	19	20	3	338	640	*	5	15
Calif.	377	403	N	N 130	160	*	17 358	60	*	× .	1
Alaska	2	8		4	3		14	661	*	14	52
lawaii	7	6	*	23	30	*	13	33		8	3
Buam P.R.	1	4	U	1	10	U			U		
in.	10	11	1.	7	1	*	1	3	*		
Amer. Samoa			Ü		1	U	*	*	U	*	*
C.N.M.I.			ŭ	4		U			U		

# TABLE IV. Deaths in 122 U.S. cities,\* week ending November 15, 1997 (46th Week)

		di Cau	ses, By	Age (Y	ears)		P8d*		-	Ul Cau	ses, By	Age (Y	(ears)		P8d <sup>†</sup>
Reporting Area	All Ages	>65	45-64	25-44	1-24	<1	Total	Reporting Area	All Ages	>65	45-64	25-44	1-24	<1	Tota
NEW ENGLAND	558	410	86	43	11	7	45	S. ATLANTIC	1,280	825	263	129	41	21	65
loston, Mass.	158	106	26	16	7	2	17	Atlanta, Ga.	157	99	37	17	4	*	
ridgeport, Conn.	30	22	- 6	1	3	-	1	Baltimore, Md.	172	119	30	15	7	1	13
ambridge, Mass.	25	22	2	1		-	3	Charlotte, N.C.	107	75	18	11	1	2	1
all River, Mass.	19	17 37	8	1	1		- :	Jacksonville, Fla.	127	78	28	13	3	4	
lartford, Conn. owell, Mass.	25	20	3	2 2	,	1	2 2	Miami, Fla. Norfolk, Va.	44	62 28	25	10	3	3	
ynn, Mass.	10	8	3	1			- 11	Richmond, Va.	80	50	21	6	1	2	
lew Bedford, Mass.		17	3	2	1		il	Savannah, Ga.	39	26	7	3	3	-	
lew Haven, Conn.	49	33	9	- 6		7	3	St. Petersburg, Fla.	72	55	11	5		1	
rovidence, R.I.	52	39	8	3	- 1	- 1		Tampa, Fla.	160	104	30	20	2	4	1
omerville, Mass.	3	3	-			-	-	Washington, D.C.	206	122	46	21	14	3	
pringfield, Mass.	36	24	9	3			4	Wilmington, Del.	15	7	2	6	)×	-	
Vaterbury, Conn.	18	14		2		-	2	E.S. CENTRAL	725	486	158	53	11	16	5
Vorcester, Mass.	61	48	8	3		2	9	Birmingham, Ala.	156	104	30	11	5	5	1
AID. ATLANTIC	2,162	1,561	376	147	49	29	120	Chattanooga, Tenn.		51	12	3	2		
Ilbany, N.Y.	43	35	5	1	2	-	3	Knoxville, Tenn.	70	47	15	7	-	1	
Mentown, Pa.	25	20	5		-	-	1	Lexington, Ky.	73	42	24	5	1	1	1
luffalo, N.Y.	62	50	9	1	1	1	3	Memphis, Tenn.	151	106	32	11		2	1
Camden, N.J.	35	20	3	6	2	4		Mobile, Ala.	47	31	8	6	1	1	
lizabeth, N.J.	25	13	7	4		1		Montgomery, Ala.	42	29	9	4	-		
rie, Pa.	39	32	4		3		1	Nashville, Tenn.	118	76	28	6	2	6	
lersey City, N.J. New York City, N.Y.	53	29	14	7	1	2	3	W.S. CENTRAL	1,436	948	298	115	45	29	6
low York City, N.Y.	1,138 U	826	203 U	86	15	6	46	Austin, Tex.	55	34	12	4	2	3	
lewark, N.J. aterson, N.J.	29	13	11	U	U	Ų	0	Baton Rouge, La.	42	35	5	2	-	-	
hiladelphia, Pa.	300	195	59	19	18	9	19	Corpus Christi, Tex.		46	11	4	2		
ittsburgh, Pa.§	38	28	- 6	2	1	1	4	Dallas, Tex.	180	106	42	21	9	2	
leading, Pa.	39	34	5				2	El Paso, Tex.	68	44	12	7	3	2	
lochester, N.Y.	124	95	16	9	2	2	10	Ft. Worth, Tex.	102	64	25	6	3	4	
ichenectady, N.Y.	33	29	1	2	1			Houston, Tex.	355	218	89	30	9	9	2
Scranton, Pa.	28	24		- 1			2	Little Rock, Ark.	76	53	15	4	3	1	
Syracuse, N.Y.	100	85		2	1	2	20	New Orleans, La.	130	71	34	18	5	2	
frenton, N.J.	22	17	2	3			2	San Antonio, Tex. Shreveport, La.	197 58	155	26 10	14	3	3	1
Utica, N.Y.	20	16					2	Tulsa, Okia.	110	81	17	4	5	2	
fonkers, N.Y.	U	U		U	U	U	U	MOUNTAIN	869	606	159	57	22	21	5
.N. CENTRAL	1,866	1,287	362	146	45	25	88	Albuquerque, N.M.	85	59	17	7	1	21	b
Akron, Ohio	43	36		1			-	Boise, Idaho	34	30	3	1			
Canton, Ohio	413	37 243		45	17	9	3	Colo. Springs, Colo.		43	8	5	-	1	
Chicago, III. Cincinnati, Ohio	80	59		45	17	2	25	Denver, Colo.	98	56	23	6	5	5	
Cleveland, Ohio	126	88	29	6	2	1	2	Las Vegas, Nev.	183	120	43	13	4	3	
Columbus, Ohio	184	125		13	4	2		Ogden, Utah	39	34	3	2	*	*	
Dayton, Ohio	100	77	12	8	3	-	5	Phoenix, Ariz.	127	83	26	9	4	5	1
Detroit, Mich.	227	150		24	5	3	4	Pueblo, Colo.	23	19	3		-		
vansville, Ind.	39	28		1	1		2	Salt Lake City, Utah		70	22	4	5	6	1
ort Wayne, Ind.	52	32		10			1	Tucson, Ariz.	116	92	11	10	3	-	1
Sary, Ind.	16	8	2	3	3			PACIFIC	1,489	1,058	257	110	35	29	10
Grand Rapids, Mich		41		5	1	3	5	Berkeley, Calif.	21	12	7	1	*	1	
ndianapolis, Ind.	48	31		4	2	2	3	Fresno, Calif.	94	75	12	3	2	2	
ansing, Mich.	56 130	39		3	3	2	3	Glendale, Calif.	25	15	7	1	2		
Milwaukee, Wis. Peoria, III.	33	24		6	1	*	13	Honolulu, Hawaii	44	37	6	1			
Rockford, III.	50	38		3	-			Long Beach, Calif.	71	55		5			
South Bend, Ind.	47	35		3	3	1		Los Angeles, Calif.	330	217	57	35	12	9	
foledo, Ohio	72	50		1				Pasadena, Calif.	36	27		1	-	1	
foungstown, Ohio	54	48						Portland, Oreg. Sacramento, Calif.	54 169	45 132	25	7	3	2	1
V.N. CENTRAL	674	490		38	11	16		San Diego, Calif.	106	74		15	3	2	1
	0/4 U	490 U		38 U	U			San Francisco, Cali		86		10	3		
Des Moines, Iowa Duluth, Minn.	29	21	6		U	U		San Jose, Calif.	117	80		8	1	4	
Kansas City, Kans.	20	18		2			4	Santa Cruz, Calif.	24	18	6			-	
Kansas City, Mo.	120	71		8	2	6	8	Seattle, Wash,	119	86	20	6	4	3	
Lincoln, Nebr.	32	28		2	-	1		Spokane, Wash.	57	42	9	1	2	3	
Minneapolis, Minn.	130	106		4		2		Tacoma, Wash.	94	57	21	12	2	2	
Omaha, Nebr.	89	67			3	1		TOTAL	11,059	7.674	2061	838	270	193	69
St. Louis, Mo.	96	70			2		6	TOTAL	11,000	1,0/1	2,001	638	270	193	0
St. Paul, Minn.	85	61	1 15	5	2	2	11								
Wichita, Kans.	73	48	16		2	4	3								

U: Unavailable -: no reported cases
\*Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not

more. A death is reported by the periodic of the current week. Complete inclinated.

Preumonia and influenza.

Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

Total includes unknown ages.

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